

Work Order ID 67682

Page 1

Tuesday, March 29, 2011 11:19:54 AM

Item ID: D206-642-341

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 3/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/1/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

H

Date:

11-03-11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2650

F

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D206-642-341 CHG003

N/A *[Signature]*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00



Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Deburr Fwd edge of tube

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R ☐ Aluminum Rod ☒ M111385/M116577 BE 11/04/12

4-Grind weld flush to cap on top surface only. BE 11/04/12

5-Cut aft end to length as per dwg D2650

6-Drill pilot holes using drill Jig DT8168A (A, & B) and DT8025. Open to Ø0.312"

7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297"

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

Handwritten signature and date: 11-4-10

Handwritten signature and date: 11-4-13

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
115 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				<u>11</u>	<u>04</u>	<u>14</u>	<u>①</u>
120 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				<u>1</u>			<u>B 4/10/15</u>
125 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<u>1</u>	<u>0</u>		<u>B 4/10/14</u>

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before cutting

Start Date: 11-4-14 Time: 6:45 PM

Finish Date: 11-4-14 Time: 1:20 PM

A/R: SikaFlex-291 M116948

SikaFlex expiry date: 12-1-15

Handwritten notes and signatures:
3-08/11/14
11-4-14
[Signature]

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Handwritten note: 8/10/18

Handwritten note: [Signature]

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Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.
A/R ☐ Aluminum Rod ☒ *M11385*

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650 Debur

4- Install nut plate as per dwg

170

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

*8/10/20**3 BE11/04/20**1 0 BE11/04/19*

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

190

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

1 BK 11-4-27.

200

White Gloss(Ref.4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 11:00
OVEN TEMPERATURE: 320°
FINISH TIME: 11:30

1 BK 11-4-27.

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

210

QC3- Inspect Part Finish

0.00

= 7 m-l 11/05/04

1K



QC

Memo

0.00

Quality Control

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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

220

0.00



HandFinish

HandFinishing

Memo

0.00

Hand Finishing

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R ☐ Sikaflex-291 ☐ _____Sikaflex expiry date: ☐ _____

2-Install O-Rings D2651-3 on plugs D2651-I with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R ☐ Sikaflex-291 ☐ _____Sikaflex expiry date: ☐ _____

6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4

Batch: _____

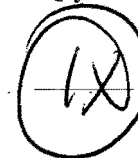
M11731S

M116945

12/01

M116945

12/01



m.d 11/05/04

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

230 QC3- Inspect Part Finish

0.00



QC Memo

0.00

Quality Control

BR 11/05/04 (1X)

240 QC5- Inspect part completeness to step on W/O

0.00



QC Memo

0.00

Quality Control

11 05 04 (1)

250 Packaging

0.00



Packaging Memo

0.00

Packaging

Identify and pack for shipping as per PPP D206-642-341

Location:

PPP Rev:

PRPG 7100

10/11/04 (1)

W/O:		WORK ORDER CHANGES					
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Run Start



Stop



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260 QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						11/6/8	

pl 11-06-7
Q

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

Tuesday, March 29, 2011 11:23:16 AM

Page 1

Work Order ID: 67682

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube



Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev: H05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM
 IPP Rev: I 08-09-29 revF as per dwg DD verified by: EC Est Rev: J 09-03-02 as per DS19440 rev.a DD verified by: EC IPP rev K 10.08.03 chg ms27039-1-08 for "C" type EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960JD416 	NAS1149D0463J	Purchased	No	M116805			Each	0.0000		1			
Washer CCR264SS3-3 		Purchased	No				Each	197.0000		2			
Cherry Rivet													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				FP-B			2						
				113973			2						
				ST311			195						
				113973			2						
				117086			193						
CR3212-4-03 		Purchased	No				Each	1,280.000		2			
Cherry Rivet													
				<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>				
				FP-B			16						
				110139			16						
				ST311			1264						
				114859			1264						

IX M/L 11/05/04

BE 11/04/20

2

BE 11/04/20

2

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Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D2620
Skidtube, 206 Skidtube

Manufactured No

Each 11.0000

1

Location

Loc Qty

Loc Code

LG

11

62684

7

64784

4

11-4-6

D2647
Cap

Manufactured No

Each 47.0000

1

Location

Loc Qty

Loc Code

LG002

47

55352

47

19

D2649
Cross Bolt Spacer

Manufactured No

Each 99.0000

19

Location

Loc Qty

Loc Code

LG001

99

65317

99

1

D2654-5
Web

Manufactured No

Each 2.0000

1

Location

Loc Qty

Loc Code

LG

2

64878

2

1

D2680-041
Nut Plate

Manufactured No

Each 32.0000

1

Location

Loc Qty

Loc Code

ST020

32

55366

32

1

Tuesday, March 29, 2011 11:23:17 AM

Shop Packet Print

Page 2

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Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

MS27039C1-08

Purchased

No

Each

780.0000

56



SCREW



M-L 11/05/04

Location

Loc Qty

Loc Code

FP-A

39

116022

39

ST293

741

115589

341

116373

400

220

Each

0.0000

54

ALS4-1032-130

Purchased

No



Insert

M 117331



56X M-L 11/05/04

AN960C10L

NAS1149C0332

Purchased

No

220

Each

0.0000

54

R



washer

M 117291



54X M-L 11/05/04

AN960JD10L

NAS1149D0332J

Purchased

No

220

Each

0.0000

2



M 117291



2X M-L 11/05/04

Washer

D2646

Manufactured

No

220

Each

57.0000

1



Aft Cap



M-L 11/05/04

Location

Loc Qty

Loc Code

FP006

57

62678

57

1X

W/O:		WORK ORDER CHANGES					
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Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D2651-1 Manufactured No

220 Each

129.0000 14 14



Plug

Location

Loc Qty

Loc Code

FP-A

129

57869 ✓

119

66445

10

m-k 11/05/04

14X

D2651-3 Manufactured No

220 Each

300.0000 14 14



O-Ring

Location

Loc Qty

Loc Code

FP-A

300

61962

300

66956

m-k 11/05/04

14X

D3535-11 Manufactured No

220 Each

8.0000 1 1



Wearshoe

Location

Loc Qty

Loc Code

FP019

8

46714

1

57261 ✓

2

63676

5

m-k 11/05/04

1X

D3535-23 Manufactured No

220 Each

3.0000 1 1



Wearshoe

Location

Loc Qty

Loc Code

FP021

3

61830

1

63571 ✓

1

66236

1

m-k 11/05/04

1X

X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, March 29, 2011 11:23:18 AM

Work Order ID: 67682

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D3535-35 Manufactured No

220 Each

13.0000

1

1



Wearshoe

Location

Loc Qty

Loc Code

FP018

13

62461

1

65926

12

D3536-11 Manufactured No

220 Each

22.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP011

22

46649

1

46715

5

57867

4

65574

12

D3536-23 Manufactured No

220 Each

35.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP011

35

43406

2

53468

1

63238

1

66240

6

66560

25

M/k 11/05/04

IX
M/k 11/05/04

M/k 11/05/04

IX

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, March 29, 2011 11:23:19 AM

Work Order ID: 67682

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/29/2011

Required Date: 4/1/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-35

Manufactured No

220 Each

14.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP012

14

62462

1

65573

1

66237

12

D3537-1

Manufactured No

220 Each

36.0000

6

6



Wearpad

Location

Loc Qty

Loc Code

FP017

36

63313

2

65927

34

D3537-3

Manufactured No

220 Each

18.0000

1

1



Wearpad

Location

Loc Qty

Loc Code

FP017

18

35697

1

61674

1

65929

16

MS27039-4-06

Purchased No

220 Each

83.0000

1

1



Screw

Location

Loc Qty

Loc Code

FP-A

34

115460

34

ST292

49

115460

49

M-L 11/05/04

IX
6
M-L 11/05/04
6X

M-L 11/05/04

IX
1
M-L 11/05/04

M-L 11/05/04
IX

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

SHOOT COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 67482
PP 11-03-29

RELEASED
08-07-23/17

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCRP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		205/407 SKIDTUBE ASSEMBLIES	NTS
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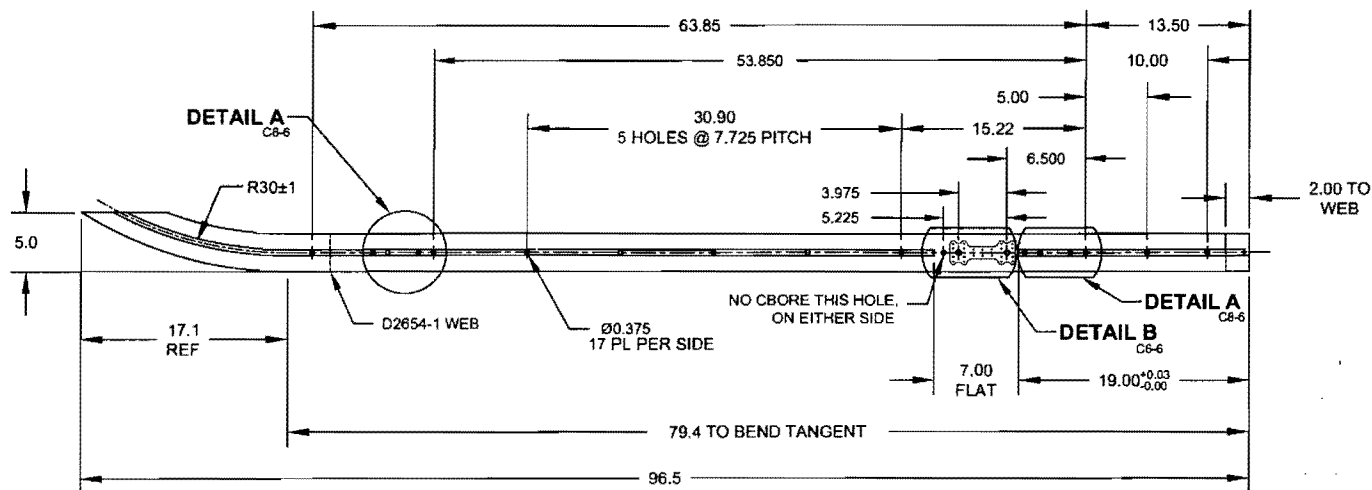
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

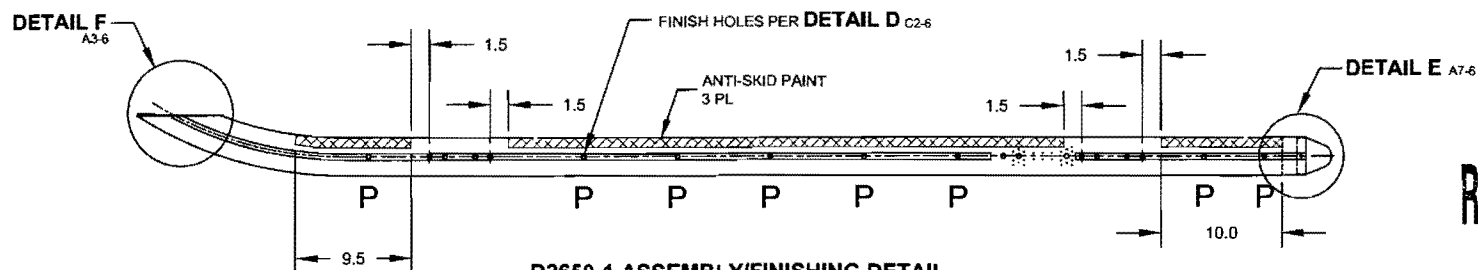
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2650-1 BENDING/DRILLING DETAIL

W/O 67682



D2650-1 ASSEMBLY/FINISHING DETAIL

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880922/117

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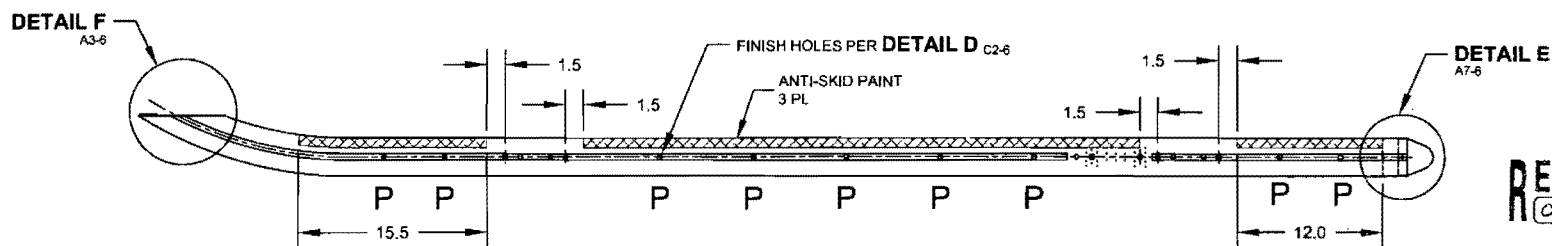
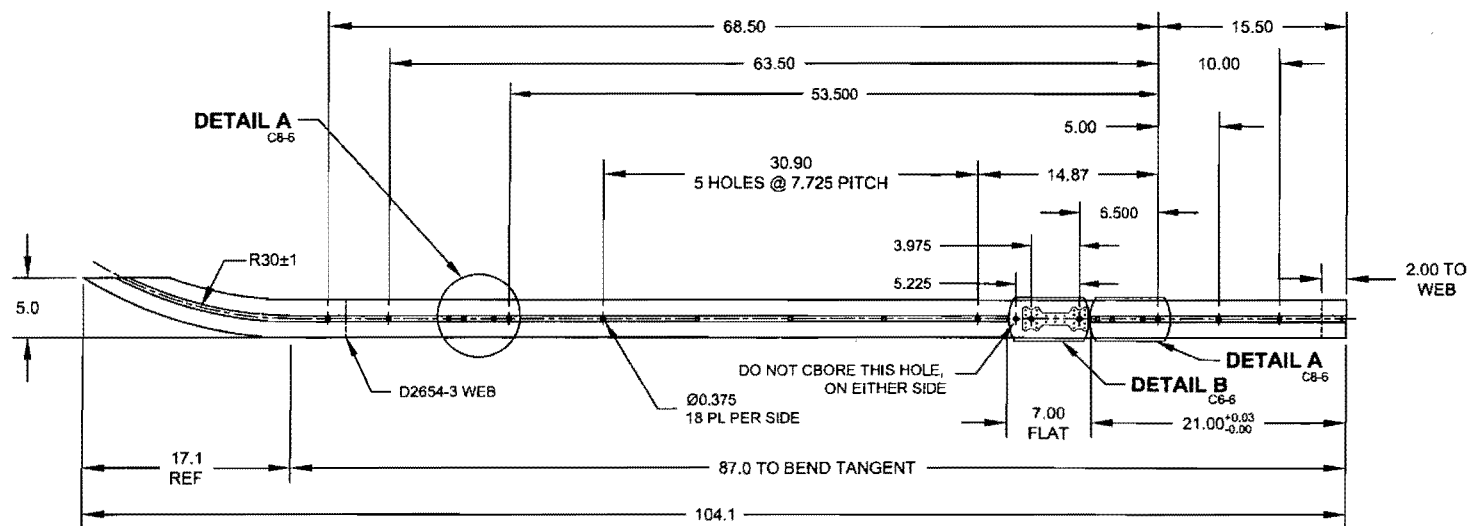
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____





Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



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08-07-22 100

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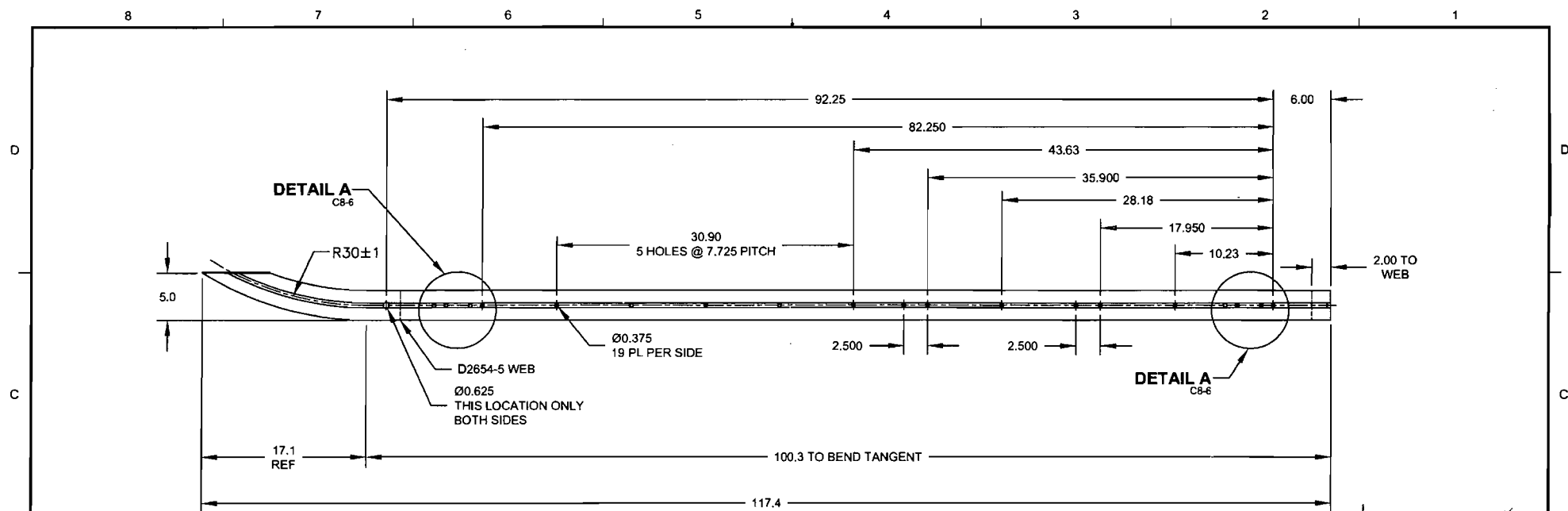
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

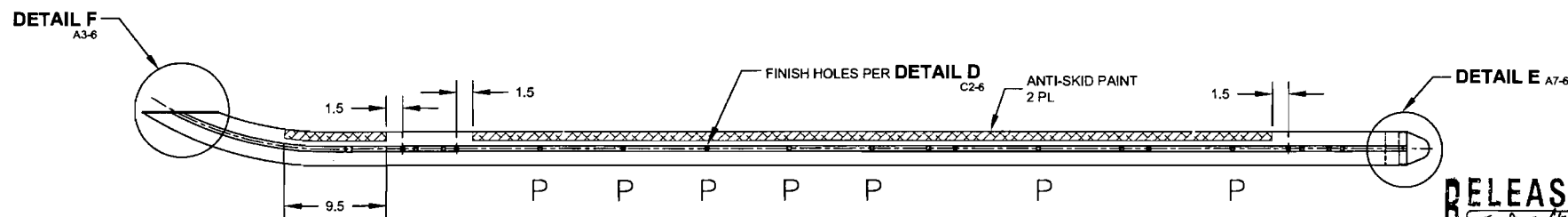
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2650-5 BENDING/DRILLING DETAIL



D2650-5 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
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MFG. APPR.	B	D2650	SHEET 4 OF 6
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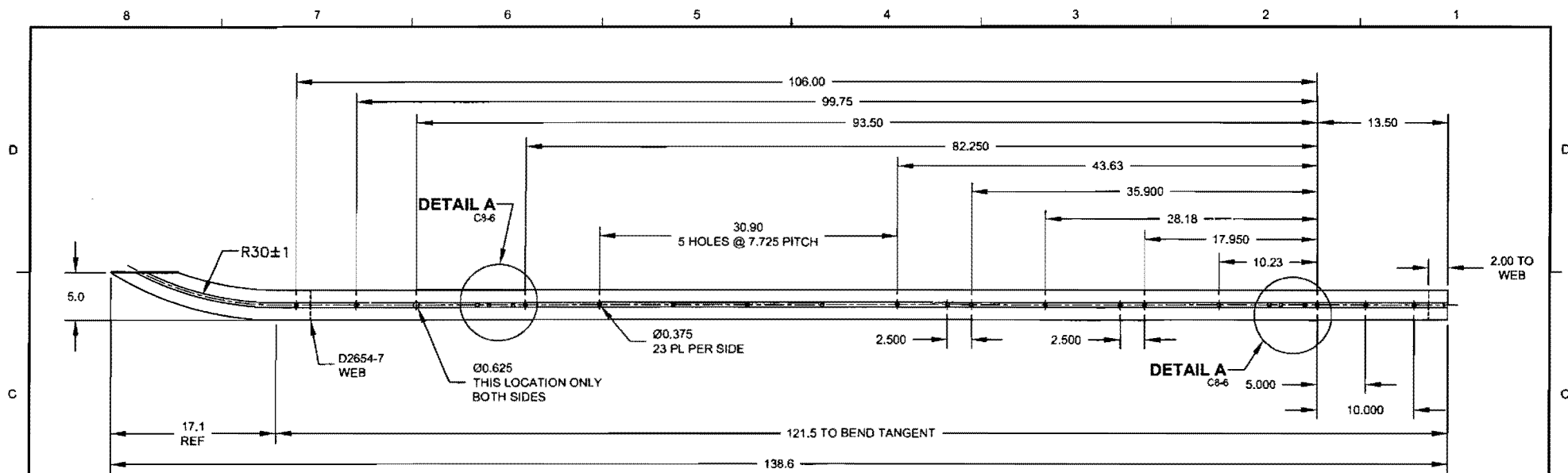
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

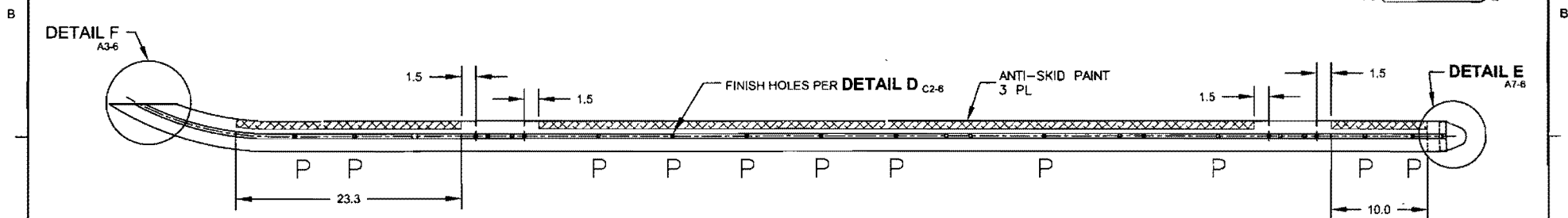
NOTE: Date & initial all entries



D2650-7 BENDING/DRILL DETAIL

460 47682

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08-07-12



D2650-7 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D2650	SHEET 5 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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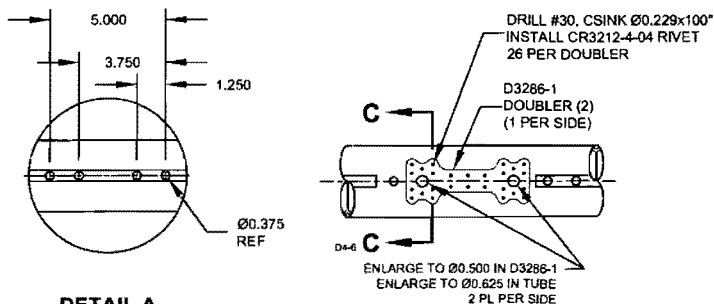
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

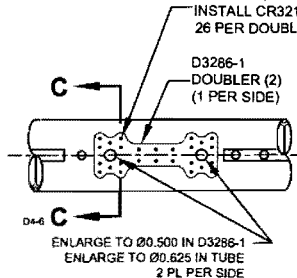
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



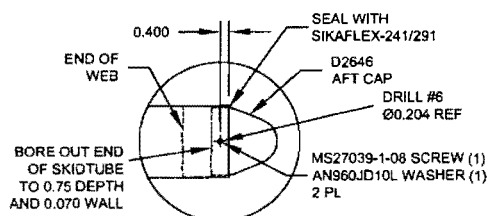
DETAIL A
SCALE 2X

C2-2
D7-2
C2-3
D7-3
C2-4
D7-4
C2-5
D6-5



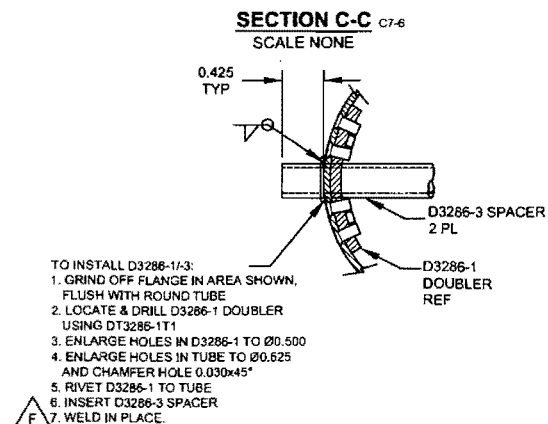
DETAIL B
SCALE 2X

C3-2
C3-3



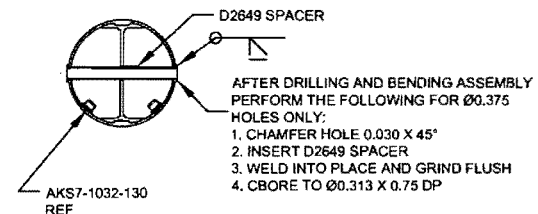
DETAIL E
SCALE 2X

B2-2
B2-3
B1-4
B1-5



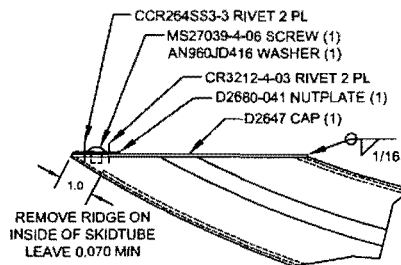
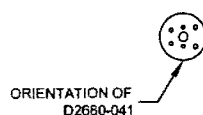
SECTION C-C
SCALE NONE

- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.030x45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE



DETAIL D
FOR Ø0.375 HOLES ONLY
SCALE 3X

B4-2
B4-3
B4-4
B4-5



DETAIL F
SCALE NONE




B8-2
B8-3
B8-4
B8-5

DETAIL F NOTES:

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

RELEASED
08-09-2019

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MFG. APPR.		D2650	SHEET 6 OF 6
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 246

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barklay Elliott
Job number: 66412
Part number: D206-642-441
Description: 206 skid tube
Welding Process: Tig[☒] Mig[]
Base material: aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Laf Lums Date of Test Coupon 11-03-09
Welder Borday Clark Date of Test Coupon 11-03-09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

